DOCUMENT RESUME

ED 309 320 CE 052 983

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TITLE	Vocational Education Performance Standards. CRS Report for Congress.
INSTITUTION	Library of Congress, Washington, D.C. Congressional Research Service.
REPORT NO	89-440-EPW
PUB DATE	6 Jul 89
NOTE	30p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Accountability; *Educational Assessment; *Educational Policy; Federal Aid; Program Effectiveness; *Program Validation; *Standards; *Vocational Education
IDENTIFIERS	*Carl D Perkins Vocational Education Act 1984; Job Training Partnership Act 1982

ABSTRACT

Contributing to the debate on the nature of the reauthorization of the Carl D. Perkins Vocational Education Act, this report discusses three proposals that would establish standards of performance for vocational education and analyzes experiences from performance standards implemented as part of other social and educational programs, such as the Job Training Partnership Act, Chapter 1, minimum competency testing, and merit pay for teachers. The proposals examined are those contained in H.R. 7 (passed by the U.S. House of Representatives in May 1989), those from the U.S. Department of Education (introduced as H.R. 2329 and S. 1133), and those from the National Assessment of Vocational Education. A section on the goals of performance standards offers a rationale for such standards. A comparison of the three proposals shows that they differ on whether or not they would link program decisions and funding to standards: H.R. 7 would not; the proposal from the Department of Education would; and the proposal from the National Assessment of Vocational Education recommends linkage for postsecondary but not for directly secondary vocational education. Another section provides the states' records on adopting performance standards and gives details of the approaches taken by Missouri and Florida. The document also discusses potential problems from performance standards, issues that result from the nature of vocational education, critical decisions, and possible alternatives to performance standards. (CML)

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89-440 EPW

CRS Report for Congress

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Vocational Education Performance Standards

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July 6, 1989

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VOCATIONAL EDUCATION PERFORMANCE STANDARDS

SUMMARY

As the 101st Congress considers the reauthorization of the Carl D. Perkins Vocational Education Act, one area of debate has centered on establishing numerical standards of performance for vocational education. Congress is considering several proposals for performance standards, including those contained in H.R. 7 (passed by the House on May 9, 1989), those from the U.S. Department of Education (ED) (introduced as H.R. 2329 and S. 1133), and those from the National Assessment of Vocational Education. An important difference in the three proposals is that H.R. 7 would not require States to tie performance standards to funding decisions while the other two proposals would require some link with these decisions.

This report discusses these proposals and analyzes experiences from performance standards implemented as part of other social and educational programs: Job Training Partnership Act, Chapter 1, minimum competency testing, and merit pay for teachers. Lessons include the possibility that, unless standards are carefully designed and implemented, standards systems might reduce services to those most in need. In addition, some programs might avoid long term, but effective, services in favor of short term and inexpensive approaches.

Because vocational education is a particularly complex and multifaceted program, designing and implementing performance standards is difficult. One issue can be deciding whose performance to assess. Vocational education aims to serve a wide range of individuals, including high school and community college students and adults requiring retraining. Performance standards suited to high school students, for example, could be inappropriate for adults. Another decision is what performance to assess. Since the goals of vocational education are diverse, a comprehensive performance standards system for vocational education would have to assess performance ranging from improved student literacy to how well the program provides occupationally specific job training.

Given the complexity in developing a performance standards system for vocational education, some urge considering alternatives to a national set of standards. One alternative is maintaining the status quo and allowing State-developed performance standards systems to continue developing. Another alternative is to foster State systems by, for example, mandating a study of systems already in place and disseminating findings on what works and what can be improved. A third alternative is developing standards to monitor Federal goals for vocational education, which traditionally have centered on increasing access for special populations to quality vocational education and improving the quality of vocational education for all participants.

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VOCATIONAL EDUCATION PERFORMANCE STANDARDS

INTRODUCTION

In the 1980s, Congress has mandated performance standards systems (i.e., numeric measures of success) for several social and human resource programs such as the Job Training Partnership Act (JTPA), Chapter 1 (the Federal compensatory education program), and the most recent welfare reform law--the Family Support Act of 1987 (P.L. 100-485).[1] Even before the creation of these systems, many States and school districts implemented quantitative performance systems for teachers (merit pay programs, for example) and for students (e.g., minimum competency testing). As the 101st Congress considers the reauthorization of the Carl D. Perkins Vocational Education Act,[2] some discussion has centered on establishing performance standards for vocational education as well. H.R. 7, as passed by the House on May 9, 1989, contains a provision for performance standards. The U.S. Department of Education (ED) proposed legislation to reauthorize the Perkins Act (introduced in the House as H.R. 2329 on May 11, 1989, and in the Senate as S. 1133 on June 6, 1989) also includes a performance standards system. The National

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[1] For further information on welfare reform, see U.S. Library of Congress. Congressional Research Service. *The Family Support Act of 1988: How It Changes the Aid to Families with Dependent Children (AFDC) and Child Support Enforcement Programs*. CRS Report for Congress No. 88-702 EPW, by Carmen D. Solomon. Washington, 1988.

[2]The Carl D. Perkins Vocational Education Act promotes access to quality vocational education for special populations such as the handicapped and disadvantaged students and supports program improvement, innovation, and expansion. Funded at $918 million for FY 1989, the Act provides less than 10 percent of all funds for vocational education. The Act funds activities in school districts and postsecondary institutions such as technical institutes and community colleges. For further information on the Perkins Act, see U.S Library of Congress. Congressional Research Service. *Carl D. Perkins Vocational Education Act: Issues for Reauthorization*. Issue Brief No. IB89069, by Richard N. Apling and Paul M. Irwin, (updated regularly). Washington, 1989.

Assessment of Vocational Education[3] recommends performance standards for vocational education programs.[4]

Performance standards systems established for various social programs share several characteristics. They focus on one or more types of performance; set levels for acceptable and unacceptable performances; measure or assess the achievement relative to those levels; and use assessment results to inform decisions such as which programs to continue funding, which to alter, and how to improve them.

Current performance standards systems differ in some respects:

- They define performance differently (for example, access to program services for important populations, such as disadvantaged or handicapped students; quantity and quality of program resources, such as, teachers' qualifications and modern equipment; program costs, such as cost per student and cost per job placement; and program effects, such as, program completion, job placement, and increased earnings of program completers).

- They focus on the performance of different people or organizations. (For example, a minimum competency testing program focuses on student performance, and a merit pay program for teachers focuses on teacher performance).

- They provide information to program administrators on different questions. (For example, should the student receive a diploma or certification of graduation; should the teacher receive tenure or a pay increase; should the program continue to receive funds?)

OVERVIEW OF PAPER

This report discusses the following topics related to establishing performance standards for vocational education:

- Arguments supporting performance standards;

- Vocational education performance standards proposed before the 101st Congress;

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[3]The Perkins Act mandated the National Assessment under the auspices of the U.S. Department of Education. Over the last 3 years, the Assessment has been conducting an extensive examination of vocational education.

[4]Descriptions of these proposals begin on page 5.

- Vocational education performance standards currently implemented in various States;
- Lessons from performance standards systems implemented in other social and educational programs;
- Critical issues in designing and implementing a performance standards system for vocational education; and
- Alternatives to national performance standards for vocational education.

The major conclusions of this report are that:

- unless carefully drawn and implemented performance standards may not improve performance and might adversely influence performance;
- the diversity and complexity of vocational education in this country may make performance standards even more difficult to develop and implement than they have been for other programs; and
- some of the objectives of national performance standards for vocational education might be met through other approaches.

THE GOALS OF PERFORMANCE STANDARDS

Performance standards have been mandated for various social programs because of concern that these programs are not working as well as they could and that adopting principles of the marketplace (such as holding programs accountable to a "bottom line") will improve these programs.[5] As the Congress deliberates the reauthorization of the Perkins Act, consideration is being given to mandating performance standards for this program as well. Marketplace analogies aside, managers and policymakers have long sought program

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[5]In reviewing arguments in support of performance standards, it is important to remember that not everyone is sanguine about applying principles of private enterprise to public programs. Some caution that market principles may be inappropriate for programs serving groups such as the disadvantaged or the handicapped. Christopher King, in his comparison of performance standards systems in a variety of programs, argues that "these are the very people and programs for which the market has apparently failed. To expect pure private sector approaches to adapt well is unreasonable. Before similar approaches are extended to [other social programs] this apparent market bias merits careful scrutiny." King, Christopher T. *Cross-cutting Performance Management Issues in Human Resource Programs.* Washington, National Commission for Employment Policy, 1988 (NCEP research report no. 88-12). p. iv.

assessment criteria on which to decide on program expansion, alteration, termination, etc.

The use of performance-based management principles in the public sector with an emphasis on program outcomes or the "bottom line" reflects in part a belief that outcome testing will improve the accountability, management, cost effectiveness, and ultimate performance of public programs.

Improved accountability: In an era of severe budget constraint, Congress, the Executive, and the Nation want assurances that Federal investment in vocational education and other social programs is paying dividends. As the President noted this year in an address to a Joint Session of Congress, "Accountability is the key to successful management of any enterprise. Education programs often fail to incorporate principles of accountability. To improve the education of America's children, educational programs at every level must set standards of excellence and hold students, teachers, and schools accountable for meeting those standards."[6] Proponents of performance standards systems maintain that setting standards and measuring accomplishments is essential to hold programs accountable for their performance.

Improved management: Well designed performance standards systems can provide important management information. Program performance information can identify weak programs that might benefit from technical assistance. For example, the accountability system recently mandated for the Chapter 1 program aims to identify and help any Chapter 1 school in which aggregate educational performance does not improve after 1 year.

Increased efficiency: Performance standards can achieve some of the efficiencies seen as resulting from market competition. By forcing programs to improve their outcomes and driving "unprofitable" programs "out of business," more services can be provided with the same resources or the same services made available with fewer resources. One outcome measure for a vocational education program is placement rate in jobs related to training students receive. A program that places an unsatisfactory number of students would be required to improve or face discontinuation.

Improved performance: Part of the argument behind standards--and in particular tying funding or other kinds of rewards and punishments to achievement measured against a set of standards--is that this imposes discipline on social programs. If the program meets or exceeds performance standards, it is rewarded (e.g., it is continued or expanded); if it fails, it is

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[6]*Building a Better America*. Document accompanying President Bush's budget address to a Joint Session of Congress, Feb. 9, 1989.

punished (e.g., by losing funding or being discontinued).[7] These punishments and rewards provide strong incentives to improve program operation.

VOCATIONAL EDUCATION PERFORMANCE STANDARDS PROPOSED BEFORE THE 101ST CONGRESS

In deliberating the reauthorization of the Perkins Act, Congress is considering several alternative approaches to performance standards for vocational education. This section summarizes the provisions in the House-passed version of H.R. 7, the proposal from the U.S. Department of Education (ED), and recommendations of the National Assessment of Vocational Education (NAVE).

PERFORMANCE STANDARDS PROPOSED IN H.R. 7

H.R. 7, as passed by the House on May 9, 1989, would require States to develop performance measures and standards[8] for vocational education programs[9] within two years following the enactment of these amendments to the Act. The House bill would require that such performance systems include: measures of gains in learning and measures of other program results

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[7]Apparently, one rationale for including performance standards in the Job Training Partnership Act (JTPA) was to provide "punishment" for poor performance. According to the Senate Report on the JTPA:

> The current CETA system [the Comprehensive Employment Training Act, the predecessor of JTPA] does not have any effective means of measuring program results or penalizing non-performance. The new legislation will provide standards for judging the programs for what they accomplish--by whether those trained are hired and earn more as a result of training. (Senate Report No. 97-469)

The actual "punishment" provided by law for poor performance is reorganization (and possible merger) of local JTPA programs.

[8]The House report accompanying H.R. 7 (House Report No. 101-41) clarifies the difference between measures and standards: "a measure is a description of an outcome, while a standard is the level or rate of that outcome." (p. 13) Thus, for example, a measure of program success would be the rate of high school completion; the standard might be a completion rate of 80 percent.

[9]H.R. 7 would rename the program: the Carl D. Perkins Vocational Education Act would become the Carl D. Perkins Applied Technology Education Act. It refers to applied technology education programs rather than vocational education programs.

such as improved job skills, high school completion rates, and rates of participants' enrollment in further training, further education, or military service. The bill would require that State systems provide incentives or adjustments in standards to encourage services to special populations. H.R. 7 would permit States to use some portion of the basic State grants to develop and implement these performance standards. The bill would also require States and the Secretary of the U.S. Department of Education to provide technical assistance on developing and implementing standards. H.R. 7 would require the Secretary to study and report on States' performance systems and the effects of these systems. The House bill would not promote links between performance standards and program decisions. The report accompanying the bill (House Report No. 101-41) notes that it is not the Committee's intention to give States the authority to penalize school districts that do not meet the specified level of performance.

THE U.S. DEPARTMENT OF EDUCATION PROPOSAL

The proposed amendments to the Perkins Act offered by the U.S. Department of Education (and introduced as H.R. 2329 by Mr. Goodling and Mr. Smith of Vermont on May 11, 1989, and as S. 1133 by Mrs. Kassebaum and Mr. Pell on June 6, 1989) also would establish performance standards for vocational education. The Department's proposal would require States to include in their State plans descriptions of standards regarding academic skills, occupational competency, and labor market outcomes and standards in other areas that the State deems appropriate. The Department would require States to describe how their standards would be used in approving and disapproving local applications for funds, improving local projects, and discontinuing ineffective projects. States would be required to evaluate and report in subsequent plans the implementation and effectiveness of their standards system. Secretarial approval of a State's plan would hinge in part on whether it "gives reasonable promise" for developing and implementing a successful performance standards system. The Secretary would be authorized (but apparently would not be mandated) to publish minimum specifications for State standards and would be permitted to conduct national research on the effects of standards.

RECOMMENDATIONS OF THE NATIONAL ASSESSMENT OF VOCATIONAL EDUCATION (NAVE)[10]

The NAVE recommends establishing separate performance standards systems for secondary and postsecondary vocational education. For secondary programs it recommends a system for monitoring improvements in vocational education at that level. The NAVE evidently has concluded that secondary programs are particularly weak and "that reliable measures of school performance [will fuel] the public demand for serious program improvement." Apparently the National Assessment advocates a system of measures that would alert the public about problems in secondary school vocational education much as indicators such as declining SAT scores resulted in demands for improving academics.

At the postsecondary level, the NAVE advocates incentives based on measures of program completion, occupational competencies, and job placement. The Assessment recommends that States develop their own systems over 3 years based on Federal guidelines, assistance, and evaluation. During the first phase, standards would be developed and put in place. During the second phase, States would link distribution of Federal funds for vocational education to the measures of performance.

COMPARISON OF THE THREE APPROACHES

A thorough analysis of these proposals is difficult because we have only general outlines of how each approach would work. The proposal contained in H.R. 7, if it were enacted, would require further clarification. We have no additional information on H.R. 2329 because no hearings have been held or debate conducted on the proposals it contains. The NAVE's director presented the National Assessment's proposals during House and Senate testimony. Presumably we will learn more specifics about them when the NAVE releases its final report.[11] In general, however, the three proposals represent different approaches to vocational education performance standards--H.R. 7 would not link program decisions to standards, the ED would link decisions to standards, and the NAVE recommends linkage for postsecondary but not for directly secondary vocational education.

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[10]The NAVE was mandated by the Perkins Act. The NAVE's 3-year assessment has been conducted under the auspice of the U.S. Department of Education. The NAVE's recommendations were presented by John Wirt in testimony before the House Subcommittee on Elementary, Secondary, and Vocational Education on Mar. 7, 1989.

[11]The NAVE's final report was to have been delivered to Congress by Jan. 1, 1989. Currently, two of five volumes of the final report are available.

The H.R. 7 proposal appears to be an interim approach to performance standards. It requires States to establish standards, suggests areas those standards might cover, permits States to use some portion of Perkins funds to implement these standards, directs the States and ED to provide technical assistance to school districts and postsecondary institutions, and requires ED to evaluate the systems States implement. Since H.R. 7 would require the evaluation to be completed 4 years after the reauthorization of the Perkins Act, presumably the results from States' experiences could inform deliberations prior to the next reauthorization on the feasibility of a Federal system of performance standards for vocational education. At this stage, H.R. 7 apparently would not require States to use the results of performance assessment to allocate funds or make other program decisions. The proposal emphasizes learning and competency gains (the only area that must be included among a State's standards). The bill recognizes that technical assistance would be required to devise and implement standards but provides no new authorization of funds for assistance.

The ED proposal would require States to adopt standards in the areas of academic skills, occupational competencies, and labor market outcomes. States would also be able to establish standards in other areas. Unlike the H.R. 7 approach, the ED proposal would require links between performance and program decisions. The ED system shows some link with JTPA standards. For example, States would be required to have standards consistent with JTPA standards. Similar to the Secretary of Labor's mandated role under JTPA to set standards, the Secretary of Education could set minimum national standards.

The NAVE's recommendations recognize that different performance systems may be necessary for secondary and postsecondary vocational education. For secondary vocational education, the Assessment has apparently concluded that dependable measures of performance--which presumably would confirm the view that vocational education at the secondary level needs reform--will suffice to kindle public demands for improvements, just as evidence of declining test scores helped motivate calls for reform of academic education. Evidently the Assessment has concluded that it is more feasible to hold postsecondary vocational education accountable for measurement outcomes such as program completion and job placement. Like the H.R. 7 approach, the NAVE advocates an interim phase--during which States would develop standards; but unlike H.R. 7, the NAVE also advocates a second phase in which Federal funding decisions would be tied to performance.

STATE VOCATIONAL EDUCATION PERFORMANCE STANDARDS

Many States have implemented performance standards systems for vocational education. According to the Office of Technology Assessment (OTA),[12] 20 States are either testing or developing tests of vocational students' occupational competencies. Eleven other States are considering the development of such tests. Twenty-seven States either collect or are considering collecting follow-up data on labor market outcomes of vocational education programs. Nine of these States have set standards for job placement rates and allocate some vocational education funds based on these standards. Others assess outcomes but use the results to indicate districts that need technical assistance to improve their programs.[13]

This section outlines systems in Missouri and Florida. Performance standards systems in these two States have been operating for several years and illustrate two different approaches. The Missouri system identifies and rewards good performance. Florida's approach identifies programs failing to meet standards, helps these programs improve, and discontinues programs that continue to fail.

MISSOURI

Missouri's Division of Vocational and Adult Education developed an index to distribute incentive funds to the State's area vocational-technical schools (AVTS). First implemented in school year 1986-87, the index consists of two factors: placements of program completers and labor market supply and demand for a given skill area. Schools receive credit for each student employed. They receive more credit for students placed in training-related occupation and less credit for those employed in occupations unrelated to their training.[14] The school receives no credit for unemployed completers,

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[12]U.S. Congress. Office of Technology Assessment. *Performance Standards for Secondary School Vocational Education*. Washington, Apr. 1989.

[13]Illinois, for example, uses seven indicators to detect districts in trouble. The indicators are: placements, labor market demand for occupations, program enrollment, employer satisfaction with students, student satisfaction with the program, program costs, and mastery of employability skills.

[14]The definition of placement is: "A student in a job preparatory vocational program shall be considered a 'placement' if he has become employed in an occupation requiring the use of the competencies acquired in his vocational program as indicated on the follow up survey form, has entered military service, or has continued on to postsecondary education." "Exceptional students" (except for gifted and talented students) who are not placed are not included in the computation of the placement rate.

those not in school or in the military, and completers who cannot be located. Schools also receive points based on the number of students placed in occupations with shortages. Schools receive more credit for each student placed in low supply/high demand jobs and no additional credit for placements in high supply/low demand jobs. The Missouri Occupational Information Coordinating Committee collects the supply and demand data.

Before instituting its performance standards system, Missouri paid the same percentage of teachers' salaries for all area vocational schools. Now these schools receive a base funding level plus incentive funding based on performance. The State appropriated $1.5 million to start the program. By FY 1989, the incentive funds accounted for nearly one-third of State vocational education salaries. By 1988 results indicated increased scores on the index, which the State interprets as indicating improved program performance.

FLORIDA

By statute, Florida provides that "funding for vocational education shall reflect the results of [program evaluations]." The statute, which went into effect during the 1985-86 school year, requires the State's Department of Education to review any job preparatory--i.e., occupationally specific training--vocational program (either at the secondary or community college level) with a placement rate of less than 60 percent for a given year. The review includes a plan for improving the placement rate. According to statute, "Any job preparatory vocational program in which the placement rate for persons completing the program is less than 70 percent for 3 consecutive years shall be ineligible for future state funding."

To avoid unfair penalties resulting from conditions beyond the control of a school district or a community college, the statute provides that "the [State] Department of Education may adjust program placement rates . . . using a statistically valid and reliable methodology approved by the State Department of Education." Factors in such a methodology include "the percent of program completers who are minorities and the percent completers who are economically disadvantaged."

Program personnel may use a mail followup, exit interviews, telephone interviews, or state employment data tapes to determine placement rates. The Florida Auditor General annually determines the accuracy of reported placement rates.

LESSONS FROM STANDARDS IN OTHER SOCIAL AND EDUCATIONAL PROGRAMS

This section discusses performance standards systems for several social and educational programs: JTPA, ESEA Chapter 1, minimum competency testing, and merit pay for teachers.

JOB TRAINING PARTNERSHIP ACT[15]

The JTPA is the Federal Government's largest job training program with appropriations of approximately $3.7 billion for FY 1989.[16] It replaced the Comprehensive Employment and Training Act (CETA) in 1984 and differs from that program in several respects: It requires significant partnerships with business and industry (through Private Industry Councils or PICs); it provides for a significant role for State governors; except for minor exceptions, it provides training but not subsidized employment; it strictly limits funds for non-training activities such as program administration; and it requires that JTPA programs be held accountable to performance standards.

JTPA requires Governors to divide their States into service delivery areas (SDAs), which may be the whole State, a single local government unit, or a combination of more than one such unit. Each SDA must have a PIC, composed of representatives of the private sector and other entities such as educational agencies and labor unions. Local government officials appoint the PIC members. The PIC provides policy guidance, oversees local job training programs, establishes procedures for developing a job training plan, and

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[15] For a more extensive overview of the JTPA, see U.S. Library of Congress. Congressional Research Service. *Job Training Partnership Act: Background and Description*. CRS Report for Congress No. 83-76 EPW, by Karen Spar. Washington, 1983.

[16] The largest part of the JTPA is title II-A, which provides job training for economically disadvantaged adults and youth, although up to 10 percent of participants may be nondisadvantaged who encounter barriers to employment, for example, individuals with limited English proficiency, school dropouts, and handicapped individuals. A minimum of 40 percent of participants must be economically disadvantaged youth. Training services provided under title II-A include education, on-the-job training in either the public or private sector, work experience, and support services. Exemplary youth programs (sec. 205), which may be conducted at the option of local planners, include: education for employment, pre-employment skills training, entry employment experience, and school-to-work transition assistance.

selects a program grantee and administrative entity in accord with locally elected officials.[17]

The JTPA system of performance standards for programs under title II-A[18] provides for the Secretary of Labor to set national standards and to determine the rules under which Governors and other program decision makers may vary Federal performance standards, implement incentives and sanctions, undertake performance contracting, etc. Governors, with the advice of their State Councils, set and implement standards for their States. Governors may also add standards, determine the relative importance of each standard, adjust numerical standards for each PIC, fashion the contracting process, establish and define incentives to promote services for the hard-to-serve, and develop other policies for sanction and incentives.

The PIC and local elected officials determine who will develop the 2-year plan for the SDA and jointly submit it to the Governor. Among other things, the plan sets out the performance standards for job training services in the SDA. The PICs influence the determination of the ultimate standards for their SDAs through the application process and negotiations over the final contract. According to King, these contracts drive the system. "Rhetoric aside, if placement targets are the sole measures included in PICs' contracts with providers, then placement is the only real standard."[19]

JTPA requires the Secretary to prescribe different performance standards for adults and youth. For adults, standards are set for job placement rate, hourly wages earned by those placed, and cost per placement. For youth, standards also include placement rate but in addition include standards on job readiness and program completion rate.

If an SDA does not meet its standards, the Governor must provide technical assistance. If failure persists for 2 years, the Governor must impose a reorganization plan.[20] The Governor can use up to 6 percent of the State's

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[17]According to King (*Cross-cutting Performance*, p. 27, note 30), local service delivery can take on one of several configurations: the PIC allocates resources to a subcontractor, the PIC itself delivers services, or a combination of these two systems. Apparently the first and third models are more common.

[18]There are also standards for title III of JTPA, which provides training for dislocated workers.

[19]King, *Crossing-cutting Performance*, p. 10.

[20]Testimony by Sol Levitan, indicated that, although "precise information is not available, the National Governors' Association has no record of a single case where a State sanctioned an SDA for failure to meet performance

(continued...)

allocation for title II-A for incentive awards to SDAs exceeding performance standards. The Governor must earmark unused portions of these funds for technical assistance.

Experts have identified various problems arising from the JTPA requirements. Performance standards for outcomes such as job placement rates can influence the type of clients JTPA programs serve. This problem is often referred to as "creaming" because programs "skim" the best candidates from the pool of eligible clients and provide them with services. Consequently, those individuals most in need of job training are less likely to receive training. As Bailey notes, "For SDAs that have problems meeting their standards, tighter selection may be an easier way to improve measured performance than management reforms or other measures to increase program efficiency."[21]

A 1988 study done for the National Commission for Employment Policy (NCEP)[22] found creaming to be a particular problem when States require programs to exceed, rather than just meet,' standards. In States that emphasized exceeding performance standards, the study found a tendency to reduce services to some hard-to-serve groups and decrease the amount of basic skills for remedial services. JTPA cost standards can also lead to creaming. The study reported "that SDAs in States that place more weight on the Federal cost standard tended to serve fewer hard-to-serve clients and that SDAs concerned about exceeding the cost standards tended to design less intense service." (p.5)

Another problem is that JTPA performance standards can influence the training JTPA programs provide. Bailey found that "operations of JTPA programs have increasingly used short-term interventions designed to provide some counseling in job search and career planning followed by direct placement into jobs. These programs often involve only a few hours of

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[20](...continued)
standards." U.S. Congress. House. Committee on Education and Labor. *Testimony during Oversight Hearings on the Job Training Partnership Act.* Washington, Sept. 29, 1988. p. 123.

[21]Bailey, Thomas R. *Market Forces and Private Sector Processes in Government Policy: The Job Training Partnership Act.* Journal of Policy Analysis and Management, v. 7, no. 2, 1988. p. 300-315.

[22]Dickinson, Katherine P., et al. *Evaluation of the Effects of JTPA Performance Standards on Clients, Services, and Costs.* Washington, National Commission for Employment Policy, 1988 (NCEP research report no. 88-15). The NCEP is authorized under the JTPA.

'training,' so they cost little. They are particularly useful in lowering the average cost per placement."[23]

Problems have also arisen because JTPA programs must meet multiple standards. Advocates of performance standards argue that social programs with multiple goals require multiple standards; however, since performance on one standard is not necessarily independent of performance on the other, programs aiming to achieve a given performance level on one standard may have to sacrifice performance on another standard. The NCEP study found that JTPA youth programs emphasizing competency skills had problems meeting job placement standards and those emphasizing job readiness and employment training had difficulty achieving standards related to educational outcome.

Some observers of JTPA cite problems with adjustment models. Adjustment models aim to create a "fair" system. In the JTPA program, for example, States may apply the Department of Labor adjustment model or develop and apply their own adjustments. In any case the goal is to adjust standards for SDAs that face severe economic conditions or that aim to serve high proportions of disadvantaged clients. Without some adjustment in standards, SDAs would be penalized for economic conditions beyond their control or for serving disadvantaged clients.

Levitan questions the effectiveness of adjustment models to compensate SDAs faced with harsh economic conditions or aiming to serve large proportions of disadvantaged populations. He notes that such models are only as reliable as the data on which they depend. Unfortunately "the economic and demographic data given the most weight are unreliable or outdated . . . . [L]ocal unemployment data are little better than guesses. Poverty adjustments are based on 1979 data. While population density data may remain relatively stable in the short run, they are a questionable measure of the accessibility and cost of transportation to the poor. The inaccuracy of the estimates is further compounded by the fact that geographic boundaries for the data reported by the Census Bureau and other agencies do not necessarily coincide with the geographical jurisdictions of the SDAs."[24]

ESEA CHAPTER 1[25]

Revisions to the Federal compensatory education program (Title I of Chapter 1 of Elementary and Secondary Education Act) resulting from the

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[23]Bailey, *Market Forces*, p. 304.

[24]Levitan, *Testimony*, p. 121.

[25]The Chapter 1 program provides financial assistance to local educational agencies to help meet the needs of educationally deprived children.

Hawkins-Stafford Amendments of 1988 (P.L. 100-297) contain three accountability mechanisms that resemble performance standards systems (although the distribution of Federal funds or rewards to successful efforts are not explicitly included). These provisions deal with individual student performance, performance of Chapter 1 programs at the school level, and the performance of schoolwide projects.

Regarding performance of individual students, a school district must consider changes in the program for any Chapter 1 student whose performance does not improve after 1 year in the program. If no improvement occurs after 2 years of participation in the program, the district must conduct a "thorough assessment of the educational needs" of the student.

If the aggregate performance of Chapter 1 students at a given school does not improve over 1 year, the school district must develop and implement a plan to improve the program at that school. If the plan is ineffective, the State Education Agency (SEA) and the district jointly create a second program improvement plan. The SEA and the Chapter 1 Regional Technical Assistance Center must provide technical assistance throughout this process.

The Hawkins-Stafford Amendments provide similar provisions for schoolwide projects, which districts may implement at schools with at least 75 percent of their enrollment at or below the poverty level. Schoolwide projects have more flexibility in their use of Chapter 1 funds but must show improved performance. After 3 years of implementation, a schoolwide project must demonstrate that the achievement of students in its program is above the district's overall average for Chapter 1 students or is above the school's average for the three years preceding the implementation of the schoolwide project.

Performance standards for Chapter 1 programs were only enacted last year as part of the Hawkins-Stafford Amendments and have not yet been implemented. Thus it is too early to know what effect they will have on the Chapter 1 program. According to *Education Daily* (January 11, 1989, p. 7), the ED's proposed rules regulating these provisions have caused some concern at the local level. The American Association of School Administrators (AASA), the National School Boards Association (NASB), the Council of Great City Schools, the National Education Association (NEA), and the American Federation of Teachers (AFT) in a joint letter to ED observed that "the proposed regulations improperly authorize [S]tates to set minimum standards for local Chapter 1 programs including objective measures to assess aggregate student performance and substantial progress toward meeting desired outcomes. This will too easily result in [S]tates establishing rigid, arbitrary statewide 'cutoff' scores to determine local program quality." In a separate letter, the AASA argued that "minimum standards would become the ceiling . . . and could thus drag down higher standards that might have otherwise been established at the local level."

MINIMUM COMPETENCY TESTING AND MERIT PAY

Although minimum competency testing (MCT) and merit pay are not often termed performance standards systems, they have much in common with such systems. For example, merit pay for teachers, which has been attempted in some form in a variety of districts over the last 70 years,[26] is a "scheme that bases a teacher's compensation on performance, as measured either by gains in student test scores or by supervisors' evaluations of the teacher's actions in the classroom."[27] MCT programs set performance standards (e.g., achieving 70 percent correct answers on a competency test), assess performance with reference to that standard (i.e., test students and determine who passes and fails), and reward acceptable performance (e.g., award a high school diploma) and counter unacceptable performance by, for example, retaining students at the same grade for a second year or requiring remedial coursework in areas assessed by the MCT.

In their analysis of merit pay systems, Murnane and Cohen[28] note several problems with merit pay that should be considered in designing and implementing a vocational education performance standards system. For one, the monitoring of individual performance necessary to determine and reward merit can be expensive. One approach for assessing the performance of vocational education teachers is testing students' competencies in occupational skills. This would require developing testing procedures and testing students--both expensive activities.

Basing teachers' pay on student performance can influence who receives attention from teachers. Although somewhat similar to the problem of creaming in JTPA programs, the problem in public schools takes on different manifestations. Unlike JTPA, public schools serve everyone in the sense that all must attend school, and a performance standards system such as merit pay can provide teachers with incentives to concentrate on some groups of students and ignore others. Results from performance contracting experiments in the early 1970s, which involved contracts with private firms to teach reading to children in public schools, illustrate differential treatment of students resulting from pay for performance. According to Gramlich and Koshel, "in at least one of the sites, teachers concentrated their time on children in the middle of the test score distribution, neglecting those at the top who would advance well on their own (test score gains above a threshold

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[26]Johnson, S. M. *Merit Pay for Teachers: A Poor Prescription for Reform.* Harvard Educational Review, v. 54, no. 2, May 1984. p. 175-185.

[27]Murnane, R. J., and D. K. Cohen. *Merit Pay and the Evaluation Problem: Why Most Merit Pay Plans Fail and a Few Survive.* Harvard Educational Review, v. 56, no. 1, Feb. 1986. p. 2.

[28]Ibid.

were not rewarded), and those at the bottom, whose test scores would not respond to modest additional amounts of teacher time."[29]

Experience with minimum competency testing also provides lessons for vocational education performance standards systems. One problem with MCTs is how to set acceptable minimal scores or levels of the performance. Haney and Madaus argue that "at present, there simply is no scientific foundation for deciding what 'minimum' points should be; the decisions involved in setting them are political rather than scientific."[30] Linn, Madaus, and Pedulla[31] expand on this problem. In the final analysis, determining a minimal level to assure competency is an arbitrary process. "Depending on the difficulty of the test, the old familiar 70% correct [for a passing grade in a high school course] could be so lenient that almost no one would fail or so stringent that a passing score would be a very rare event." (p. 3)[32]

To illustrate how the results of standards can vary depending on slight differences in acceptable performance, Linn and his co-authors reported the results of a study of Kansas school teachers using four methods to set minimums on a 60-item test. Results of these "systematic" approaches ranged from 28 correct answers to 48 as the minimum standard. Application of the most stringent standard would result in a failure rate of 29 percent; using the most lenient standard would mean that 2 percent failed. None of the four approaches used to set standards could be demonstrated to be "better" or "more objective" than any other of the four; yet outcomes and impacts on those assessed varied greatly depending on the approach used.

Additional complexity results when one considers who should set standards (assuming a "best" selection approach was identified). Linn et al. contend that "teachers, since they work with students day in and day out, are a natural and logical group to set standards, but there are other interested parties. For example, legislators, school board members, school administrators, parents, recent graduates, and employers all come quickly to mind as groups with a stake in the outcome." (p. 8) Jaeger and his

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[29]Gramlich, E., and P. Koshel. *Educational Performance Contracting*. Washington, Brookings Institution, 1975. Cited by Murnane and Cohen, *Merit Pay and the Evaluation Problem*, p. 5.

[30]Haney, Walt, and George F. Madaus. *Making Sense of the Competency Testing Movement*. Harvard Educational Review, v. 48, no. 4, Nov. 1978. p. 468.

[31]Linn, Robert L., George F. Madaus, and Joseph J. Pedulla. *Minimum Competency Testing: Cautions on the State of the Art*. American Journal of Education, v. 91, no. 1, Nov. 1982. p. 1-35

[32]Perhaps coincidentally the Florida performance standard for job placement rates is 70 percent.

collaborators investigated how ratings differ when determined by teachers, school administrators and counselors, and registered voters using the same standards setting method.[33] Results showed that depending on who set the standards, 21 percent of students tested would pass using the teacher-determined standard but would fail if the standard recommended by voters were applied.

POTENTIAL PROBLEMS FROM PERFORMANCE STANDARDS

Experience with performance standards in other social programs point to some problems that any performance standards system for vocational education must take into account. These include:

- the impact of performance standards on who the program serves with the danger that individuals most needing services will be the least likely to be served;
- the influence of performance standards on the type of training provided with a danger that effective--but long term and expensive--services will be discouraged in favor of short term and inexpensive approaches;
- the difficulty in meeting multiple standards, some of which may not be mutually compatible;
- the problem of adjusting standards for programs in different labor markets or serving different types of clients; and
- the difficulty of setting minimum standards.

Experience from performance standards in other program areas indicate that, unless carefully designed and implemented, standards may not improve performance and may have undesired effects.

ISSUES FOR PERFORMANCE STANDARDS RESULTING FROM THE NATURE OF VOCATIONAL EDUCATION

Besides responding to problems facing any performance standards systems for other social programs, the design and implementation of a performance standards system for vocational education must respond to the diversity of

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[33]Jaeger, R.M., J. Cole, D.M. Irwin, and D.J. Pratto. *An Interactive Structure Judgment Process for Setting Passing Scores on Competency Tests Applied to the North Carolina High School Competency Tests in Reading and Mathematics*. Greensboro, Center for Education Research and Evaluation, University of North Carolina at Greensboro, 1980.

vocational education. The first part of this section discusses three aspects of the complexity and diversity of the vocational education system: the types of students served, the large number of goals, and vocational education's intricate policy environment. The second part of this section outlines several questions with respect to the design of any performance standards systems made more difficult by the complexity of vocational education.

THE DIVERSITY OF VOCATIONAL EDUCATION

One aspect of the diversity of vocational education is the wide variation in students served. Participants range from junior high school students taking career exploration to community college students completing Associate of Science degrees in technical fields. In between we find high school seniors capping off their courses of study with cooperative education programs and adult workers returning to school to learn new trades. It is unlikely that one set of performance standards could suffice for programs with this diverse clientele.

Another aspect of the diversity of vocational education is its multiple goals. Among other things, we expect vocational education to introduce students to the world of work, to provide occupationally specific job training, to provide access to quality job training for special populations such as poor and handicapped students, to retrain adults whose skills have become outmoded, to teach literacy, to improve academic achievement, and to reduce dropout rates. Any approach that holds vocational education accountable to some level of performance must either differentially assess a truly wide range of outcomes or limit what is assessed to a few of the most critical goals of the system. If the latter course is chosen, it may be difficult to reach consensus on what the critical goals are.

Like other educational programs in this country, vocational education exists in a complex policy environment. Although the Federal Government has been involved in vocational education longer than in most other areas of education, the Perkins Act currently provides less than 10 percent of the funding for all vocational education.[34] Like Federal involvement in other areas of education, the Federal Government has little influence over important areas such as teacher training, instructional supervision, curriculum development, textbook selection, or school construction. Thus the creation of comprehensive Federal standards for vocational education might be seen by some as Federal intrusion into areas traditionally reserved for States and local school districts.

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[34]The appropriation for the Perkins Act is $918,404,000 for FY 1989.

CRITICAL DECISIONS

This section discusses decisions that must be addressed in designing any performance standards systems.

What Performance Is Assessed?

Any performance standards system must define what performance is. Three definitions of performance are program access, program resources, and program outcomes.

Performance as Access. The Perkins Act has a major goal to increase access of special populations such as women and handicapped and disadvantaged students to quality vocational education. Thus one relevant measure of program performance may be the proportion of these populations enrolled in quality vocational education programs.

Performance as Program Resources. The effectiveness of a vocational education program depends on the program's resources such as the knowledge, experience, and teaching ability of its teachers; the quality of its equipment; and the safety of its workshops. A performance standards system logically could be built around measures of these inputs.

Performance as Results. Another approach to performance standards is to assess the consequences of the program for students. Since vocational education has myriad possible outcomes, a performance standards system that assesses, for example, high school vocational education programs might include some or all of the following outcomes: program completion rate, high school completion rate of program participants, skill levels of completers (both skills specific to that program and general academic skills), job placement rate of completers, job retention rate of completers, net contribution of program to wages earned by completers.

Whose Performance Is Assessed?

One approach to performance standards is to concentrate on the performance of program participants.[35] Another approach is to aggregate

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[35]Determining who participates in vocational education programs is more difficult than determining who JTPA or Chapter 1 participants are. To be useful, a performance standards system must carefully define whose performance is to be assessed and what the program is that is being held accountable for that performance. If, for example, we define vocational students as all those who take vocational education, we have a very broad pool (97 percent of all high school students take at least one vocational education course, according to the National Assessment of Vocational Education), whose exposure to vocational education varies widely--a one-half

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measures of participants' performance at different levels. For example, averaging measures of student performance for each teacher in a program could provide information on teacher performance. Aggregating student performance for each vocational program in a school or in a school district could permit the assessment of relative performance of each program.

Who Uses Performance Information and How Do They Use It?

Just as performance standard systems may focus on performance at different levels of a program and assess different types of performance, so systems differ on who can best use the information and how they can use it. For example, a system providing performance information on individual students could inform the students themselves on their level of mastery of occupational skills. Data on students' performance could be useful to teachers as indicators of students requiring additional help in a given area. Similar data could be useful to employers, as assurance that those they are considering for employment can do what they will be hired to do. A system providing teacher-level performance data can indicate to teachers areas of their strengths and weakness and can inform principals and other administrators about teachers needing additional training or skills updating. A performance system providing data on a program, school, or entire school district can indicate to local and State administrators where technical assistance might be required or which programs or districts should receive more or fewer resources.

How Flexible Should Standards Be?

Depending on what performance is measured and how performance information is used, the system may have to provide adjustments to standards to avoid, for example, penalizing programs operating in depressed labor markets or serving hard-to-serve populations. JTPA permits States to adjust performance standards according to the type of client served, length of service, and local labor market conditions. If vocational education programs are held accountable for outcomes such as program completion rates and job placement rates, teachers, guidance counselors, and administrators may be inclined to serve students who are less needy and easier to train and place. With such adjustments, programs are less likely to suffer for serving members of special populations that are target groups for the Perkins Act.

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[35](...continued)
year typing course to 3 or 4 years of sequential, specific occupational training. If we limit the performance system to students enrolled in occupationally specific courses, we risk ignoring students and courses that could benefit from the application of an accountability system.

What Results from Meeting, not Meeting, or Exceeding Standards?

In general, several actions might result when a program fails to meet a performance standard. Program staff might be required to outline how the program will be improved to make sure it meets the standard. The program might receive technical assistance. Either of these could be a preliminary step before final action, which could include decreased funding or program termination.

Just as failing performance might lead to termination, successfully meeting performance standards might result in continued funding. If funds are reallocated from failed programs, successful programs might be expanded with additional funds. Programs might also receive less tangible rewards. For example, top-performing programs might be identified as examples that other programs could look to for ideas on how to improve.

Other Issues

Certain other issues must be decided in order to implement a performance standards system for vocational education. Among these are:

- Who determines what the standards will be? (For example, will there be one set of national standards, or will States or regions within States be permitted to set or modify standards?)
- Who will monitor the system, and how will they monitor it?
- Who provides information on performance? (For example, are students surveyed on their employment status and wages, or is another system advisable?)
- If technical assistance is a component of the system, who provides the assistance, and who pays for it? (For example, the Federal Government could pay for and provide the assistance; the Federal Government could pay States to provide assistance; or recipients of assistants could be required to pay for the service.)

CONSIDERING ALTERNATIVES TO A PERFORMANCE STANDARDS SYSTEM FOR VOCATIONAL EDUCATION

In principle, few would argue against performance standards for vocational education. Even supporters of the program grant that it can be improved, and holding vocational education accountable to a set of standards would seem to be a reasonable path to program improvement. However, this report has shown that, given the diversity of vocational education in this country, developing and implementing a performance system for it would require many complex decisions on what performance to assess, who to hold accountable, and what actions to take based on performance. Experience to

date suggests that implementing a performance standards system does not guarantee that the performance of vocational education would improve. Performance standards might have negligible impact, or have negative effects, for example, by counteracting program goals such as maximizing services to hard-to-serve groups.

Although any or all the proposed approaches discussed earlier might overcome the problems faced by other systems, we do not have sufficient detail about any of them for extensive analysis of their strengths and weaknesses. Given the problems other performance systems have faced and the lack of information about proposals for vocational education performance standards, some alternatives may be considered. This section discusses three alternatives: maintaining the status quo, supporting current State performance systems, and monitoring performance linked to Federal goals for vocational education.

MAINTAIN THE STATUS QUO

The Perkins Act already contains provisions resembling performance standards. Section 113(b)(9) directs that States provide assurances that they will develop measures of program effectiveness, and provides examples of such measures: assessments of the State's labor market needs, occupational skill levels, and employment competencies. Presumably this requirement in current law has helped motivate over half the States (according to OTA) to consider or implement some system of labor market or occupational competency assessment system. Maintaining current law would allow these systems to continue to develop without further Federal guidance. Additional encouragement from ED might lead to implementation of such systems in other States. One difficulty with this approach is that some States might not have sufficient resources or inclination to develop and implement an effective system of standards.

PROMOTE STATE SYSTEMS

Besides maintaining the status quo, several steps could be taken to promote existing State systems and to expand systems into other States. As provided in H.R. 7, a study of several systems could be mandated to determine common features of successful systems, assess what works in different settings (e.g., States with different labor market conditions), and describe any problems that have developed. Results of the study could be useful to Congress for further consideration of a national performance standards system and to States wanting to implement performance standards or to improve systems already in place. The study could also inform those providing technical assistance to States to implement a performance standards system or to improve the system they currently have.

In addition to a study of current performance standards systems and technical assistance for implementing and improving such systems, funds could be authorized for research and development on measuring the outcomes of vocational education. As OTA has found, States are already investing in tests and other measures (such as hands-on tests of skills) to assess occupational competency. Federal funding might expand these efforts and disseminate the results.

An additional step to support State systems would be to permit States to use some portion of their Perkins basic grants funds to implement or enhance performance standards in their State. For example, States might be permitted to use these funds to provide incentives to districts meeting State standards and to provide technical assistance to poor performers. One drawback with studying State systems and waiting until the next reauthorization of the Perkins Act to decide whether to mandate a Federal standards system is that it would delay one aspect of a Federal response to improve vocational education.

MONITOR ACCOMPLISHMENTS OF FEDERAL GOALS

If a national system of performance standards is deemed necessary, it might be more feasible to create a Federal system to monitor performance on established Federal standards while also encouraging the establishment and improvement of a diversity of State systems to serve specific State goals for vocational education, State configurations of vocational education systems, and labor market conditions. Federal goals for vocational education have traditionally included improved access of special populations (such as disadvantaged and handicapped students) to quality vocational education and improved vocational education programs for all participants. While a performance system to improve program quality might not be feasible for reasons outlined in this report, a system to monitor access of special populations to quality programs might be more feasible.

Determining that members of a special group have access to quality vocational education and not to inferior programs poses problems. The chief problem is defining what constitutes quality. A report written for the National Assessment of Vocational Education reviews some possible indications of access to quality vocational education for handicapped students: participation in mainstreamed programs, participation in occupationally specific training, participation in coordinated series of courses, and participation in paid cooperative education or other employment programs.[36]

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[36]U.S. Department of Education. National Assessment of Vocational Education. *Access and Quality: Participation of Handicapped High School Students in Vocational Education*. Washington, Feb. 1989.

As part of their required evaluations, States could be directed to evaluate the access of special populations to quality vocational education in school districts, area vocational schools, and postsecondary institutions receiving funds under the Perkins Act. One possible approach would be a comparison between the percentage of a given group in the school district or institution as a whole and the percentage of that group in quality vocational programs. Technical assistance could be provided where there is evidence that access is inadequate.